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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/416,757

10/12/1999

LILA MADOUR

040010-440

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27045

7590

11/17/2003

ERICSSON INC.  
6300 LEGACY DRIVE  
M/S EVW2-C-2  
PLANO, TX 75024

EXAMINER

WAXMAN, ANDREW

ART UNIT

PAPER NUMBER

2667

DATE MAILED: 11/17/2003

15

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/416,757

Applicant(s)

MADOUR ET AL.

Examiner

Andrew M Waxman

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 8-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 8-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-4, 8, 9, 11, and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by over Turunen (US Patent No. 6,477,644).

Regarding claim 1, Turunen discloses a method including receiving packets over a first connection in a first network (see col. 2 lines 18-22), requesting a second connection with a second network while moving towards the second network (see col. 2 lines 23-26), and acquiring an address of a second gateway associated with the second network (see col. 2 lines 26-27).

Turunen also discloses establishing a tunnel between the first (Home Agent) and second (Foreign Agent) gateways and routing packets from the first gateway to the second gateway and then to the mobile device (see col. 2 lines 38-47 and 50-52). By routing from the first gateway (HA) in the first network (Home Network) over the Internet to a second gateway (FA) in a second network (Foreign network), thereby traversing one or more routers that are incapable of routing to the destination node and establishing a tunnel. See also FIG. 1.

Regarding claims 2 and 8, Turunen further disclose the second gateway (foreign agent) initiating, transmitting the second gateways address (see col. 2 lines 26-27), the request for the establishment of the tunnel.

Regarding claim 3, Turunen further discloses the first gateway (HA) initiating, forwarding packets to the second gateway in a second network (see col. 2 lines 50-52), the request for the establishment of the tunnel.

Regarding claim 4, Turunen further discloses the mobile host initiating, transmitting the second gateways address (see col. 2 lines 27-29), the request for the establishment of the tunnel.

Regarding claim 9, Turunen further discloses the second gateway retrieving the address of the first gateway from a centralized database. This is inherent to Turunen because the first gateway (HA), as disclosed by Turunen, contains a database storing identities of mobile hosts within its network thereby classifying it as a centralized database. Furthermore, the identity (network address) would be provided by the first gateway to the second gateway in the source address portion of the header, which is essential to packet communications.

Regarding claim 11, it is inherent to Turunen that the identity (network address) would be provided by the first gateway to the second gateway in the source address portion of the header, which is essential to packet communications.

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Regarding claim 13, Turunen further discloses the mobile device providing the first data network with the identity of the second gateway. See col. 2 lines 27-30.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 10, 12, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turunen.

Regarding claim 10, Turunen discloses all of the limitations as recited above with respect to claim 1,

Turunen does not expressly disclose the first gateway is a Gateway General Packet Radio Services Serving Node.

At the time the invention was made it would have been obvious to one of ordinary skill in the art to include a Gateway General Packet Radio Services Serving Node as the first gateway in the invention as disclosed by Turunen.

One of ordinary skill in the art would have been motivated to do this in order to make the invention, as disclosed by Turunen, conform to a widely used mobile networking standard, thereby making the invention more profitable.

Regarding claim 12, Turunen discloses all of the limitations as recited above with respect to claim 3.

Turunen does not expressly disclose the first gateway buffering data intended for the mobile device until the tunnel has been established with the second gateway.

At the time the invention was made it would have been obvious to one of ordinary skill in the art to include buffering the data intended for the mobile device until the tunnel has been established with the second gateway into the invention as disclosed by Turunen.

One of ordinary skill in the art would have been motivated to do this to prevent unnecessary loss of packet data, thereby providing for a more reliable, and efficient communication system.

Regarding claim 15, Turunen discloses all of the limitations as recited above with respect to claim 1.

Turunen does not disclose the communications network using a MobileIP Protocol.

At the time the invention was made it would have been obvious to one of ordinary skill in the art to make use of the MobileIP networking protocol in the invention as disclosed by Turunen.

One of ordinary skill in the art would have been motivated to do this in order to make the invention, as disclosed by Turunen, conform to a widely used mobile networking protocol standard, thereby making the invention more profitable.

***Claim Rejections - 35 USC § 103***

3. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Turunen in view of Caceres et al. ("Fast and Scalable Wireless Handoffs in Support of Mobile Internet Audio"), hereinafter referred to as Caceres.

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Regarding claim 14, Turunen discloses all of the limitations as recited above with respect to claim 4.

Turunen does not expressly disclose the mobile device providing the second network with the network identity of the first gateway.

Caceres discloses the mobile host sending a greet message when entering a new network, which includes the network address of the MH default gateway. See page 354, 2<sup>nd</sup> column, pgh. 3-4.

At the time the invention was made it would have been obvious to one of ordinary skill in the art to send a greet message, when entering a new network, which includes the network address of the Mobile Host's default gateway, as disclosed by Caceres, in the invention as disclosed by Turunen.

One of ordinary skill in the art would have been motivated to do this in order to provide for a more efficient handoff between gateways within networks. See page 354 1<sup>st</sup> column pgh. 5.

### ***Response to Arguments***

Applicant's arguments filed 3 November 2003 have been fully considered but they are not persuasive.



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Applicant contends that the prior art of record does not teach or fairly suggest “receiving packets, associated with a first session over a first connection in a first data communication network. Wherein said first connection is handled by a first gateway.”

However, the Examiner contends that the prior art of record does indeed disclose this limitation. The prior art (Turunen) does teach that the functionality of the home agent is “off” while the mobile host is within its home area, however, Turunen also discloses the path of information (FIG. 1) traveling through the Home Agent to the destination, or in other words serving to forward the information. The Examiner contends that this forwarding constitutes a “handling” of the first connection, because without the Home Agents forwarding capability the information could not be transmitted or received by the mobile host.

Applicant also contends that the prior art of record does not teach or fairly suggest “establishing a tunnel between the first gateway associated with the first data communication network and said second gateway before routing packets over said established tunnel.”

However, the Examiner contends that the prior art of record (Turunen) does indeed disclose the above limitation. Turunen does teach of using a care-of-IP-address, and that in itself is the establishment of the tunnel before the transmission of information from gateway one (HA) to Gateway two (FA). A tunnel is merely the packaging of a payload into another packet in order to send the information over a network, such as the Internet, which uses a different protocol as the network in which the host or hosts reside. Therefore, the care-of-address indeed constitutes the establishment of a tunnel from the Home Area (6) through the Internet (5) to the Foreign Area (7).

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew M Waxman whose telephone number is (703) 305-8086. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (703) 305-4378. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

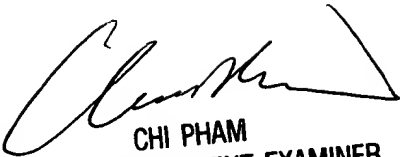
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

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Andrew M. Waxman

  
CHI PHAM  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600 1/14/03